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APPLICATION NO.	1	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,755		08/21/2003	Wolfgang Lortz	238506US0X	7274
22850	7590	11/30/2006		EXAMINER	
C. IRVIN I			WEIER, A	WEIER, ANTHONY J	
OBLON, SP 1940 DUKE	,	ICCLELLAND, MA	ART UNIT	PAPER NUMBER	
ALEXANDRIA, VA 22314				1761	
				DATE MAILED: 11/30/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
Office Action Summer	10/644,755	LORTZ ET AL.						
Office Action Summary	Examiner	Art Unit						
	Anthony Weier	1761						
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).						
Status								
1) Responsive to communication(s) filed on 08 Se	entember 2006							
· · · · · · · · · · · · · · · · · · ·	Responsive to communication(s) filed on <u>08 September 2006</u> .  This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
· <u> </u>	<i>,</i> —							
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
	x parto Quayre, 1955 O.D. 11, 40	00 0.0. 210.						
Disposition of Claims								
4)⊠ Claim(s) <u>1-29</u> is/are pending in the application.								
	4a) Of the above claim(s) <u>13-29</u> is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-12</u> is/are rejected.								
•	Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.							
Application Papers								
9) The specification is objected to by the Examiner	r.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correcti	<del>-</del> · ·							
11)☐ The oath or declaration is objected to by the Exa								
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. & 119(a)	-(d) or (f)						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:								
1. ☐ Certified copies of the priority documents have been received.								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
1) X Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)						
2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite						
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	атепт Арріісатіоп						
	-/							

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## **DETAILED ACTION**

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## Election/Restrictions

1. Applicant's election with traverse of Group I (claims 1-12) in the reply filed on 9/8/06 is acknowledged. The traversal is on the ground(s) that the Examiner has not provided references to support his conclusion on distinctness and that the search and examination of the entire application would not impose a serious burden. This is not found persuasive because the examiner is not required to provide references but must provide reasons and/or examples to support his conclusion. Such reasoning was provided in the Restriction Requirement. As for serious burden, almost all of the groups are classified in different areas and all of the groups would require individual searches that would not be commensurate with one another.

Applicant further argues that two way distinctness has not been provided between Groups I and III. However, two way distinctness was provided regarding same (see middle paragraph on page 3 of Restriction Requirement). Applicant also argues that Groups III and II should have been related as product and process of using same rather than product and processing making same. Applicant is correct. Inventions are distinct in that the powder product may be used in different processes where an aqueous dispersion is not employed such as in various ceramic manufacturing processes and in the preparation of sintered alloys.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

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2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of Andersson et al, Alexander et al (U.S. Patent No. 3007878), and WO 00/20221.

Andersson et al discloses an aqueous dispersion comprising silicon dioxide in an amount of, for example, 40% at a pH of, for example, 4 (using hydrochloric or phosphoric acid; col. 4, lines 15-38; claim 1) and a cation-providing amphoteric compound having, for example, Al wherein the amount of said compound to surface area of the silicon dioxide falls within the range called for in the instant claims (e.g. col. 5), said silicon dioxide having a BET of, for example, 300 m2/g (col. 1). It is expected that same would possess a negative zeta potential due to the presence of both ingredients in such amounts and the particular viscosity as called for in the instant claims due to similarities in processing with that of the instant invention.

Alexander et al '878 discloses an aqueous dispersion comprising silicon dioxide in an amount of, for example, 30% at a pH of, for example 4.2 (Example 1) and a cation-providing amphoteric compound having, for example, Al wherein the amount of said compound to surface area of the silicon dioxide falls within the range called for in the instant claims (e.g. cols. 2 and 3), said silicon dioxide having a BET of, for example, 200 m2/g (Example 1) and the use of sodium hydroxide in preparing same. It is expected that same would possess a negative zeta potential due to the presence of

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both ingredients in such amounts and the particular viscosity as called for in the instant claims due to similarities in processing with that of the instant invention.

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WO 00/20221 discloses an aqueous dispersion comprising silicon dioxide (pyrogenically produced) in an amount of, for example, 20% at a pH of, for example, 3-4 (pages 3, 6, and 12) and a cation-providing amphoteric compound having, for example, Al wherein the amount of said compound to surface area of the silicon dioxide and also size of same each fall within the ranges called for in the instant claims (e.g. page 9), and the use of hydrochloric acid in preparing same (page 20). At a certain point, same further possesses a negative zeta potential as set forth in Figure 1. WO 00/20221 further discloses a variety of additives including, for example, preservatives (page 19). It is expected that same would possess the particular ratio of cation-providing compound to silicon dioxide and the particular viscosity as called for in the instant claims due to similarities in processing with that of the instant invention.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Weier November 22, 2006 Anthony Weier Primary Examiner

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